

AMENDMENTS TO 2000 UNIFORM PLUMBING CODE

102.1 Administrative Authority is amended to read as follows:

The administrative authority shall be the authority duly appointed to enforce this code and will be referred to herein as the director of building inspections.

102.2.1 Duties and Powers of Administrative Authority is amended to read as follows:

The director of building inspections may appoint such assistants, deputies, inspectors or other employees as are necessary to carry out the function of the department and this code. The plumbing division shall be a part of the building inspections department. No employee connected with the plumbing division, except a member of the board established by this code shall be financially interested in the furnishing of labor, material, or appliances for construction, alteration or maintenance of plumbing installations in a building or in the making of plans or specifications thereof, unless such employee is the owner of such building. No such employee shall engage in any work, which is inconsistent with his duties or with the interest of the division.

102.3.1 is amended by adding the following:

Obtaining a permit in the name of a person authorized by law to do plumbing work, and thereafter permitting a person not licensed by law, or not employed by same person to do such work, is a violation of the state licensing law and such violations shall be reported to the Texas State Plumbing Examiners' Board with a recommendation that the permit holder's license be revoked or suspended.

102 is amended by adding 102.4 to read as follows:

102.4 Plumbing Appeals and Advisory Board

102.4.1 There is hereby appointed a plumbing appeals and advisory board. The Board shall consist of 11 members, the director of building inspections or his designated representative, a representative from the Metropolitan Health District, a representative from the San Antonio Water System and a representative from City Public Service, the latter 4 being ex-officio, non-voting members.

102.4.2 The appointive members shall be appointed by the city council for two-year terms. The appointive members will consist of one homebuilder, one architect, two master plumbers, one of whom shall represent the open shop segment of the industry and one of whom shall represent the union shop segment; two journeyman plumbers, one of whom shall represent the open shop segment and one of whom shall represent the union segment; one practicing professional mechanical engineer, one plumbing contractor and three laymen/consumers.

- 102.4.3 The members shall elect a chairman and vice-chairman from their own membership who shall serve a one-year term, but no person shall serve as chairman for more than two consecutive years.
- 102 is amended by adding 102.5 to read as follows:
- 102.5 Powers and Duties of the Plumbing Appeals and Advisory Board
- 102.5.1 The board shall have jurisdiction over all appeals from decisions of the director, which relate to plumbing installations and shall determine the intent and meaning of the provisions of this code. The board shall determine which materials are equally good and desirable to those permitted by this code and permit the use of same in accordance with this code. The board shall have no power to otherwise modify or change this code. The determinations by the board shall be final and binding on all parties, and the director shall comply with and enforce the decisions of the board.
- 102.5.2 Whenever the board determines that any provision of this code is inadequate, incorrect or obsolete, it shall recommend a corrective amendment to the city council for adoption.
- 102 is amended by adding 102.6 to read as follows:
- 102.6 Meetings and Procedures
- 102.6.1 Regular meetings of the board shall be held on the second Wednesday of each month when necessary for the purpose of hearing appeals and rendering interpretations of the plumbing code and hearing applications of the proposed use of new materials and new methods of installation.
- 102.6.2 Six members shall constitute a quorum. A majority of members present and voting in the affirmative shall be required to pass a motion.
- 102 is amended by adding 102.7 to read as follows:
- 102.7 Appeals
- Appeals shall be made in writing and shall be submitted no later than the first Wednesday of the month. Appellant may appear in person or be represented by another person or persons and may introduce evidence to support the appellant's claims. The appellant shall cause to be made at the appellant's own expense any tests or research required by the board to substantiate his claims. Each application to the board shall be accompanied by a filing fee as set forth in the fee schedule adopted by the city of San Antonio.
- 102 is amended by adding 102.8 to read as follows:
- 102.8 Illegal Work

Any person in the business of plumbing whose work does not conform to the rules and regulations as set forth in this code, or whose workmanship or materials are of inferior quality, shall, upon notice from the director, make necessary changes or corrections so as to conform to this code. If work has not been changed or corrected within 10 days, the director may then refuse to issue additional permits to such person until such work has fully complied with the rules and regulations of this code.

102 is amended by adding 102.9 to read as follows:

102.9 Identification of Vehicles

Each person engaged in the business of plumbing contracting, construction, maintenance or repair shall identify all vehicles used for the transportation of materials or supplies, equipment or tools for and in the performance of such work with signs showing the name and type of business and the master plumber's license number under which such plumbing contracting, construction, maintenance or repair is being conducted. Such identification and information shall be correct at all times and shall be a decal or painted setting out such information and shall be placed on each side of the vehicle in letters at least two inches in height and shall be in full view and legible at all times. It shall be unlawful to use vehicles for the transportation of materials, supplies, equipment or tools in the performance of plumbing contracting, construction, maintenance or repair without such identification being on such vehicles as prescribed herein.

102 is amended by adding 102.10 to read as follows:

102.10 License Required

Before any person shall engage in the business of plumbing within the city, said person shall be qualified as set forth in this code and shall have a current master plumber's license obtained from the state board of plumbing examiners. The license shall be registered with the city by submitting the appropriate fee as set forth in the fee schedule adopted by the city of San Antonio. Where any plumbing work is being done, a master or journeyman plumber shall, at all times, be present on the job and in actual control and in charge of the work being done.

103.1 is amended by adding 103.1.4 to read as follows:

103.1.4 Who may obtain permits

103.1.4.1 Any duly licensed master plumber. See Section 103.1.4.7 for bond and insurance requirements.

103.1.4.2 Any homeowner performing plumbing work on a homestead wherein he/she resides. The installation is to be made by the homeowner without the assistance of any person or persons.

103.1.4.3 Licensed irrigators for the installation of back flow devices for irrigation systems. Must have state irrigator's license.

- 103.1.4.4 Water softener companies that hold a Class III Texas Natural Resources Conservation Commission license for the installation or change out of water softeners and associated equipment.
- 103.1.4.5 Licensed fire line contractors for back flow devices on fire lines.
- 103.1.4.6 Plumbing work done by anyone who is regularly employed or acting as a maintenance man or maintenance engineer, incidental to and in connection with the business in which he is employed or engaged, and who does not engage in the occupation of a plumber for the general public. See state licensing law for definition of maintenance person or maintenance engineer.
- EXCEPTION 1: Any person who is employed by the railroad for plumbing work done upon the premises or equipment of the railroad and who does not engage in the occupation of a plumber for the general public.
- EXCEPTION 2: Any person engaged by any public service company for plumbing work in connection with laying, maintenance and operation of its service mains or lines and the installation, alteration, adjustment, repair, removal or renovation of all types of appurtenances, equipment and appliances directly related to public service companies, properties and/or jurisdiction.
- 103.1.4.7 Gas work done by a certified LP gas installer Licensed under chapter 113, Natural Resources Code, as amended. (limited to underground service piping from the tank to the building or pool heater)
- 103.1.4 is amended by adding 103.1.4.8 to read as follows:
- 103.1.4.8 Bond and Insurance

Before any person shall engage in the business of plumbing within the city, such person shall deposit with the city a certificate of insurance by an insurance company authorized and admitted to do business in the state of Texas, certifying that the applicant is insured to the limit of at least \$100,000 public liability per occurrence, \$100,000 property damage liability insurance per occurrence and product/completed operations coverage, to be approved by the director and present a good and sufficient bond in the sum of \$5000 conditioned that the person engaged in the plumbing business will faithfully observe all the laws pertaining to plumbing and main laying. Or shall provide a certificate of insurance issued by an insurance company authorized and admitted to do business in the state of Texas for commercial general liability insurance and products/ completed operations coverage for the master plumber for claims for property damage or bodily injury, regardless of whether the claim arises from a negligence claim or on a contract claim, and shall be in a coverage amount of not less than 300,000 for all claims arising in any one-year period. Further, any persons engaged in the business of plumbing shall indemnify and hold harmless the city from any and all damages, claims, liens or losses, including, but not limited to personal injury or death and property damage, arising from any acts or

omission of any character whatsoever caused by such person, his agents or employees, engaged in the plumbing business.

103 is amended by adding 103.4 to read as follows:

103.4.1 Permit Fees

The fee for each permit shall be set forth in the fee schedule as adopted by the city of San Antonio.

103.4.2 Plan Review is amended to read as follows:

When a plan or other data is required by Section 103.2.2 to be submitted, a plan review fee shall be paid at the time of submitting plans and specifications for review. When plans are incomplete or changed so as to require additional review, an additional fee shall be charged in accordance with the fee schedule as adopted by the city of San Antonio.

103.5.6 paragraphs 4 and 5 have amended to read as follows:

The reinspection fee charged shall be in accordance with the fee schedule adopted by the city of San Antonio. In instances where reinspection fees have been assessed, all fees shall be paid before release of the utilities.

Table 1-1 is deleted and replaced by the fee schedule as adopted by the city of San Antonio.

103 is amended by adding 103.9 and 103.10 to read as follows:

103.9 The latest edition of the Uniform Plumbing Code (UPC) as published by the International Association of Plumbing and Mechanical Officials (IAPMO) or another nationally recognized code with out substantive changes is the adopted code for the city of San Antonio and shall go into effect not less than 90 days or more than 180 days from the date of its publication and shall require a vote in the affirmative by the members of the Plumbing Appeals and Advisory Board. The Board may extend the 180 day time limit for just cause.

103.10 The local amendments shall remain in effect as applicable until amended by the Board to conform to any procedural changes in the UPC.

311 is amended by adding 311.9 to read as follows:

311.9 No electric lines are to be installed in the same ditch with plumbing, gas, sewer or water piping unless a separation of 36" is maintained.

313 is amended by adding 313.13 to read as follows:

313.13 When accessible openings are required by this code, they shall be a minimum of 12" x 12" in dimension unless otherwise approved by the administrative authority.

314.3 is amended to read as follows:

Piping in the ground shall be laid on a firm bed for its entire length. Where support is otherwise provided, it shall comply with Table 3-2 and not exceed 24" above ground (Two steel rods crisscrossed and tied to pipe with tie wire and spaced per Table 3-2 will be required on horizontal piping raised above ground.)

402.1 Water Conservation is amended to read as follows:

The maximum discharge flow rates for plumbing fixture fittings shall be in accordance with applicable standards referenced in Chapter 3 and listed in Table 14-1, but in no case shall they exceed the maximum requirements of the Texas Natural Resources Conservation Commission, Chapter 372, titled "Environmental Performance Standards for Plumbing Fixtures."

412.2 is hereby deleted.

420 is amended by adding an exception to read as follows:

EXCEPTION: Pressure balancing, thermostatic or combination mixing valves, though recommended, shall not be required for showers and tub-shower combinations in single-family dwellings.

509 is amended by replacing the last sentence to read as follows:

Only electric water heaters may be installed under a stairway or landing.

510 is amended by adding 510.9 to read as follows:

510.9 Water heaters installed in exterior locations shall be protected by an enclosure and shall be installed in accordance with Section 507.0, 508.0, 511.0 and 512.0.

511.2 is amended by adding an exception to read as follows:

EXCEPTION: Water heaters of 12 gallons or less installed above suspended ceiling 9 feet in height or less do not require a permanent ladder.

603.3.4 is amended by adding the following:

All backflow assemblies and devices shall be installed in accordance with the installation standards provided by the director of building inspections.

603.4.6.1 is amended by adding another type to read as follows:

4. Double check valve assembly.

603.4.13 is Deleted and is amended to read as follows:

Water supply to carbonators shall be protected by either a double check valve assembly or an rp device.

603.4.18.1 is amended to read as follows:

Except as provided under sections 603.4.18.2 and 603.4.18.3, potable water supplies to fire protection systems that are normally under pressure, including but not limited to standpipes and automatic sprinkler systems shall be protected from back-pressure and back-siphonage by one of the following testable devices:

1. Double check valve assembly
2. Double check detector assembly
3. Reduced pressure backflow preventor
- 4. Reduced pressure detector assembly**

604.1 is amended by adding the following:

Asbestos cement piping is prohibited for use on potable water lines. The use of CPVC below slab shall be free of any joints.

604.2 is amended by deleting the exception

604.11.1 is amended by adding 604.11.1.1 to read as follows:

- 604.11.1.1
1. Tees with an internal diameter smaller than the tubing are prohibited.
 2. All piping branches come off a manifold that is one pipe size larger than the largest branch on the manifold.

701.1.3 is amended to read as follows:

No vitrified clay pipe or fittings shall be used above ground, under slab or buildings, or where pressurized by a pump or ejector. They shall be kept at least 12" below ground.

701.2 is amended by adding 701.2.4 to read as follows:

701.2.4 Any hubless-type pipe joint made underground or under a slab shall be made with a wide-bodied shielded coupling.

707.4 is amended by changing Exception 1 to read as follows:

EXCEPTION 1: Cleanouts may be omitted on a horizontal drain lines less than 5 feet in length unless the line is serving washing machines, kitchen sinks or urinals.

707 is amended by adding 707.15 to read as follows:

707.15 All washing machines and kitchen sinks shall have an accessible cleanout.

712.2 is amended to read as follows:

'42 inches head of water' instead of '10 feet head of water'

712 is amended by adding 712.2.1 to read as follows:

712.2.1 The first floor DWV system shall be retested at the top out stage to assure there are no broken drain pipes below slab. The system shall be tested to the overflow level of the tub when installed, or the next reasonable point on the system as predetermined by the Plumbing Inspector.

715.1 is amended to read as follows:

The building sewer, beginning two feet from any building or structure shall be a minimum of SDR.35PVC.

717 is amended by changing the last sentence to read as follows:

No building sewer within private property shall be smaller than 3 inch Schedule 40 PVC.

718 is amended by adding the 718.4 to read as follows:

718.4 Sewers over Edwards Recharge Zone shall be installed in accordance with TNRCC requirements, Figures 7-1 or 7-2 and the following:

1. Materials for sanitary sewer laterals shall conform to the city of San Antonio Standard Specification for Private Sewage Facilities. All flexible pipe shall conform to a minimum of ASTM Designation D3034 (Schedule 40 or better for four-inch lateral and SDR-35 or better for six-inch lateral) with compression joint gaskets or shall be solvent joint.
2. If the property is on the Edwards Recharge Zone, TNRCC requires that a registered professional engineer, registered sanitarian, or appropriate city inspector inspects and certifies the service lateral prior to covering, in accordance with 31 TAC SS313.4(bx9). A letter of certification must be sent to the TNRCC San Antonio office.
3. No blasting shall be permitted when tying a lateral into an existing sewer main, unless first approved by the blasting division of SAWS and after applicable blasting permits are obtained.
4. Tapping into manhole over recharge zone shall be prohibited

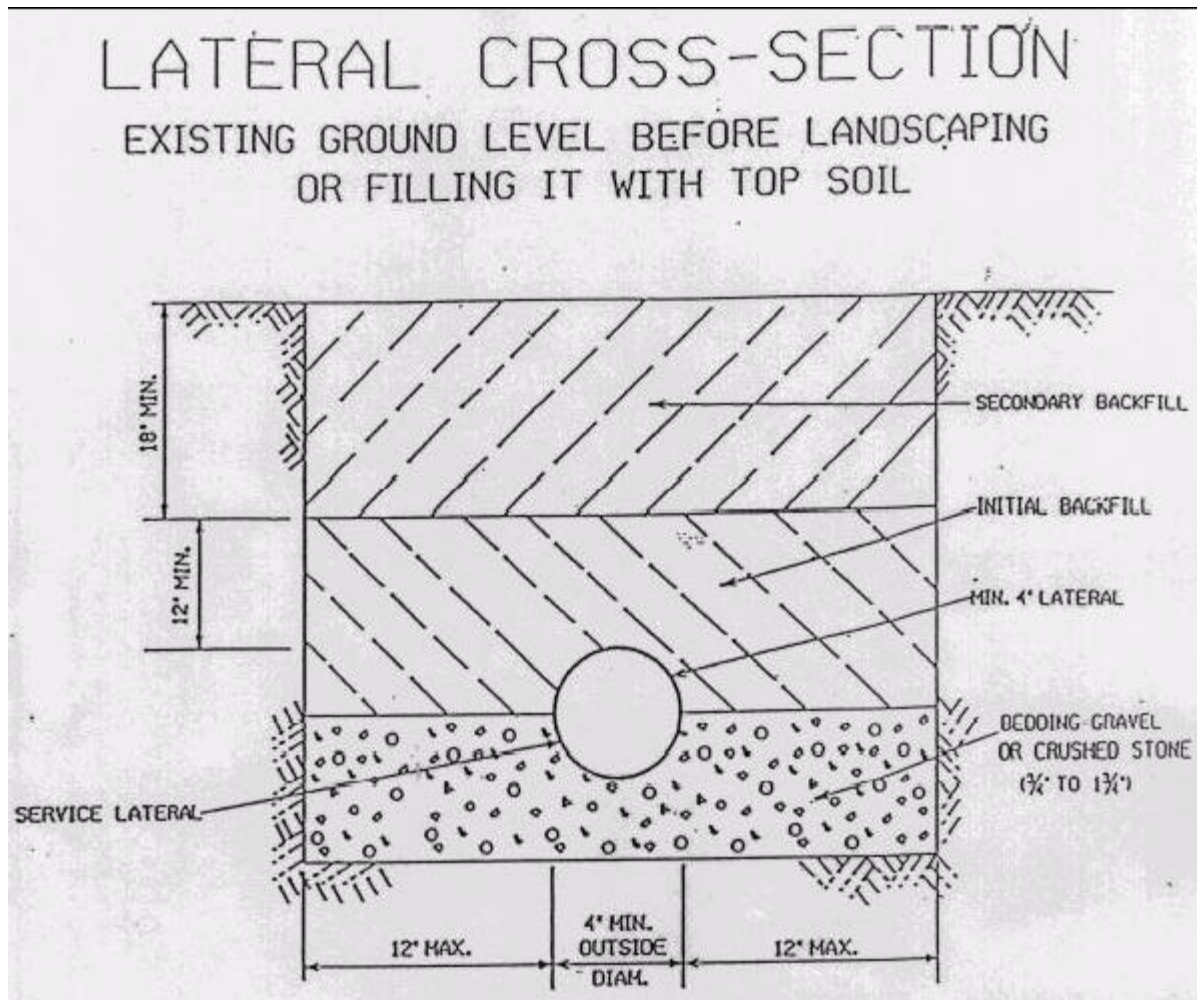


FIGURE 7-1

Backfilling: Backfill for laterals shall be divided into three separate zones:

1. Bedding - Where acceptable materials are encountered at the pipe-bearing level, they shall be acceptable for bedding purposes. Where unacceptable materials, such as water, silt, muck, trash, debris or rock in ledge or boulder are found at the pipe-bearing level, if flexible pipe is used, the trench should be under excavated as directed and backfilled with crushed stone or gravel, one-fourth inch to one and three-fourths inch size. The embedding shall extend up the sides of the pipe sufficiently to embed the lower quadrant of the pipe.
2. Initial backfill shall extend from the bedding surface to one foot above the top of the pipe. Where acceptable laying conditions exist, the excavated materials may be used as initial backfill material. Where unacceptable laying conditions and material are encountered, or where flexible pipe is to be laid, the initial backfill shall consist of well graded gravel, crushed screenings or sand, or material approved by the inspector.
3. Secondary backfill shall extend from one foot above the pipe to the top of the trench and shall consist of materials removed from the trench, and shall be free from brush, debris and junk, and contain no stones greater than one-half the trench width.

4. Initial backfill material shall be on the job site at the time of inspection.

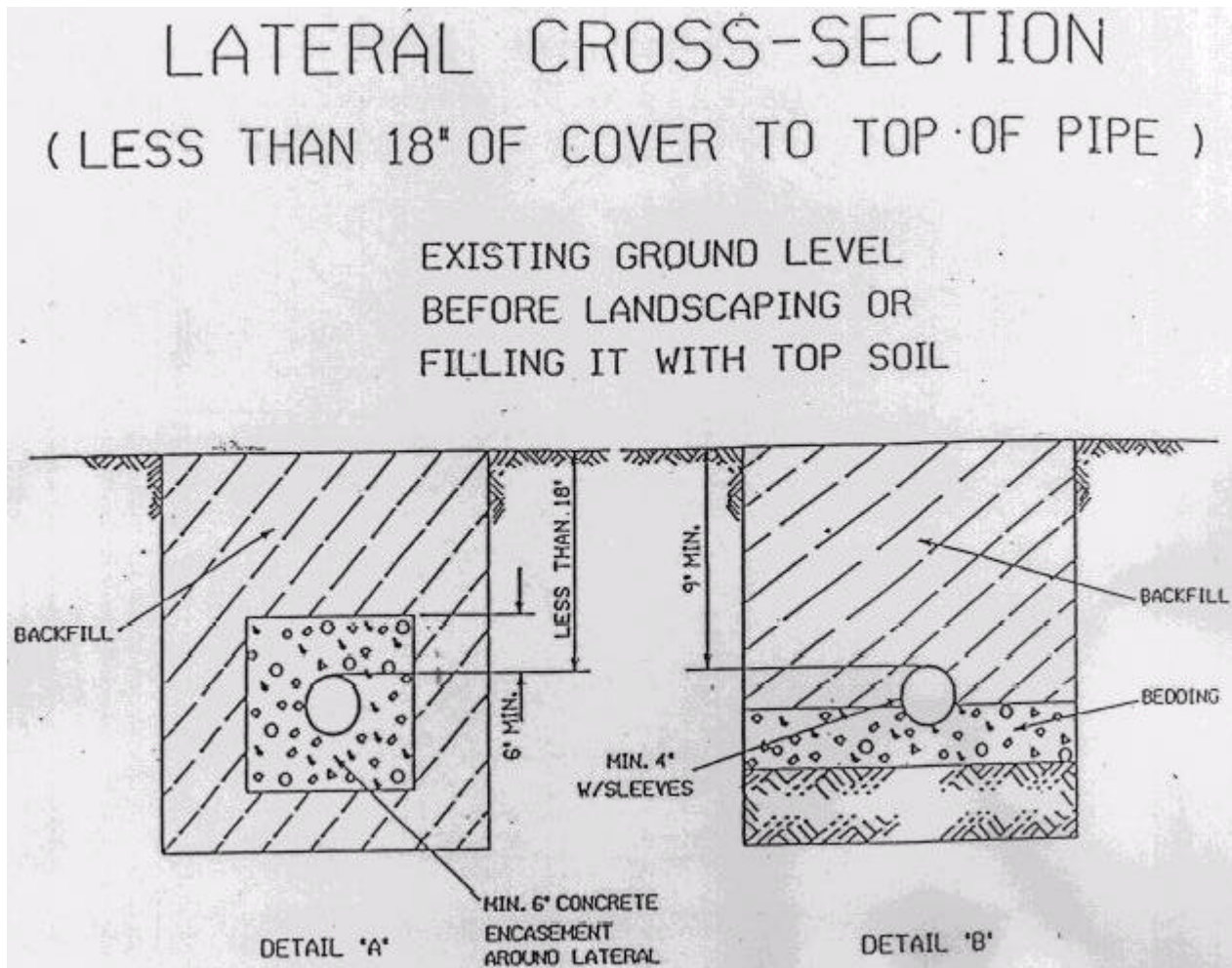


FIGURE 7-2

Notes:

1. A minimum of 18 inches of cover on top of the lateral shall be maintained, or the lateral must be:
 - a. encased with 6 inches of concrete having a minimum compression strength of 2,500 psi;
 - b. instead of concrete encasement, sleeving with bigger diameter pipe can be used for the entire length of less than 18 inches in depth (Detail "B"). The sleeving material shall be of the same material as the lateral and must have at least 9 inches of cover material to the existing ground level.
2. Bedding and backfill must conform to the requirements for bedding and initial backfill in Figure 7-2 and notations.

719 is amended by adding 719.7 to read as follows:

- 719.7 Cleanouts located in traffic-bearing areas shall be installed with a vehicle traffic-bearing box. The box shall be set in concrete slab, extending at least 12 inches from the perimeter of the cleanout. The slab shall be no less than 6 inches thick. The concrete shall be no less than 2,500 psi.
- 723 is hereby deleted
- . 807.4 is amended by adding 807.4.1
- In lieu of the air gap fitting, a dishwasher loop may be used. It must be securely fastened as high as possible under the counter top.
- 905.3 is amended to read as follows:
- Unless prohibited by structural conditions, each vent shall rise to a point not less than 6 inches above the flood level rim of the fixture served before offsetting horizontally, and whenever two or more vent pipes converge, each such vent pipe shall rise to a point at least 6 inches in height above the flood level rim of the plumbing fixture it serves before being connected to any other vent. Vents less than 6 inches above the flood level rim of the fixture shall be installed with approved drainage fittings, materials and grade to the drain. All horizontal vents installed below the over-floor rim of the fixture they serve shall have a cleanout installed on the riser in an accessible location.
- EXCEPTION: A vent that continues, uninterrupted through the roof and is accessible from the roof to rod out, would be acceptable.
- 1009 is amended by adding 1009.3.1 and 1009.3.2 to read as follows:
- 1009.3.1 All interceptors (clarifiers) shall be equipped with a 90 degree inverted elbow or equivalent, used inside the interceptor on the effluent side of the interceptor (clarified). Relief vents for interceptors shall terminate to the atmosphere independent from any other vent.
- 1009.3.2 The above are minimum specifications for interceptors and separators. An engineer may be retained to design an interceptor or separator. The design and structural integrity shall conform or exceed the standards outlined above. A professional engineer may design for specific operational requirements, however, the plans must be submitted with a professional engineer's seal for approval.
- 1011.0 is amended by adding 1011.2 to read as follows:
- 1011.2 Automatic car washes (w/high pressure sprays and/or brushes) shall install a 50 GPM interceptor, minimum, for a 4-bay vehicle wash. The size of the interceptor shall increase 10 GPM for each additional wash bay over 4. Single bay or portable washer type vehicle washes shall install a 20 GPM interceptor, minimum. The sizing criteria for automatic car washes shall be based on the above mentioned GPM x 12-minute retention time.

- 1012 is amended by adding 1012.2 and 1012.3 to read as follows:
- 1012.2 Public and private washaterias and commercial laundries shall install a lint trap equipped with a conveniently located and easily removable wire basket, or other similar device, that will prevent strings, rags, buttons, or other prohibited material from entering the sanitary sewer system. The basket or other similar device shall prevent passage to the sanitary sewer system of solids greater than 1/2 inch in diameter. The lint trap size shall be based on the total GPM of all fixtures, appliances and appurtenances draining to it.
- 1012.3 In lieu of a lint trap, a lint interceptor may be installed. The interceptor shall be sized and designed by a Texas registered engineer with his seal and signature on the drawings.
- 1014.7 is amended by adding 1014.7.1 to read as follows:
- 1014.7.1 Waste in excess of one hundred and forty (140) degrees Fahrenheit shall not discharge into a grease trap.
- 1015 is amended by adding 1015.2 to read as follows:
- 1015.2 All commercial food waste disposal units and dishwashers shall be connected to and discharge directly into grease interceptors.
- 1016 is amended by adding 1016.4.1 to read as follows:
- 1016.4.1 Sand interceptors shall be installed in the drainage systems of the following establishments: garages, car washes, service stations, or any place of business where heavy solids or solids greater than ½ inch may be introduced into the sanitary sewer system. The sizing criteria for a sand interceptor shall be based on the required GPM x 12-minute retention times to obtain the tank size in gallon capacity.
- Chapter 10 is amended by adding 1018 to read as follows:
- 1018 Silver recovery units shall be installed in wasteline(s) leading from x-ray processing, photographic processing, and/or any procedures in establishments such as medical labs, photo finishers, printers, graphic arts production facilities, hospital, veterinary hospitals, or other establishments where silver may be introduced into the sanitary sewer system.
- 1106 is amended by adding 1106.5 to read as follows:
- 1106.5 Sizing of rainwater piping is based upon maximum inches of rainfall per hour falling upon a given roof area in square feet. Use table D-1 in appendix D for sizing both primary rainwater systems and overflow or emergency rainwater systems.
- 1204.3.1 is amended by adding the following sentence:

The piping shall be tested by closing all openings and subjecting the pipes to an air pressure that will support a column of mercury 15" in height for at least 15 minutes, or a 10 psi air test using a dial gauge as described in Section 319 with a Grade A1 or better quality.

1204.3.2 is Deleted and is amended to read as follows:

Final piping inspection shall be made after all piping authorized by the permit has been installed and after all portions thereof which are to be covered or concealed are so concealed and after all fixtures, appliances and shut-off valves have been attached thereto. This inspection shall include a column of mercury 6" in height for at least 15 minutes, or of a 5 psi air test using a dial gauge as described in section 319 with a Grade A1 or better quality.

1210.01 is amended by changing the last sentence to read as follows:

Approved PE 2406 or 3408 pipe may be used in exterior buried piping systems.

1210 is amended by adding 1210.6 to read as follows:

1210.6 AGA approved CSST systems will be allowed when installed per the manufacturer's requirements by a licensed plumber who is certified/qualified by the manufacturer of the brand of CSST that he/she is installing.

1210.6.1 Steel piping will be required for the meter loop and into the wall and up thru the top plate with a 90° steel pipe fitting in the attic for the transition.

1210.6.2 The approved gas regulator for the system shall be installed in a ventilated attic. When the regulator is installed in interior locations, the vent shall be piped to the exterior of the building.

1210.6.3 When CSST tubing passes behind stucco, plaster or areas where staples are used, it shall be protected by a continuous sleeve or AGA approved shield that is twice the diameter of the CSST tubing being protected.

1211.6 is amended by adding the following:
PE piping shall be bedded in sand. There shall be 6 inches of sand below the pipe and 6 inches above the pipe. The width of the ditch shall allow for sufficient sand protection on either side of the pipe.

1211.19 is amended to read as follows:

A number 18 copper tracer wire or other approved material shall be installed 6" above non-metallic gas piping and shall terminate above grade at each end. When a plastic detectable tape with a metal core is used, it shall be buried in the trench 6" above the pipe and shall be secured to the risers at each end of the line. The plastic tape shall be of a bright color and shall be imprinted with the following: "Caution: Gas Line Buried Below"

1212 is amended by adding exception (9) to read as follows:

(9) Gas flex connectors for appliances or equipment installed in exterior locations shall be approved for that use and shall be protected from vandalism and damage.

All of the Appendix chapters are adopted

App. E 6 is amended by adding E 6.2 to read as follows:

E 6.2 Manufactured / Mobile Home park shall meet the following requirements for the drainage / sewer system on site.

The sewer main shall be 6 inch minimum, with 4 inch minimum laterals to the M/H pad and a 4 inch p-trap. There shall be one 3 inch vent for each 10 traps starting at the upper most point on the system. The vent shall connect to the drain system at the top portion of the drain pipe and terminate a minimum of 10 ft. above finish grade. The horizontal run shall be kept as short as reasonably possible.

103.1 is amended by adding the following sentence:

A minimum of 12 minutes retention time is required.

103.2 is Deleted and is amended to read as follows:

There shall be an adequate number of manholes to provide access for cleaning all areas of an interceptor, one manhole per trap compartment. Manhole covers shall be gas tight in construction having a minimum opening dimension of 20".

App. H103 is amended by adding 103.4 and 103.5 to read as follows:

103.4 All interceptors shall have the size of the interceptor (in gallons) permanently affixed to the device.

103.5 All concrete utilized in the construction of interceptors shall have a minimum strength of 3000 psi.

App. H107 is amended to read as follows:

An effluent sampling well on all interceptors shall be required. The sample well shall have a riser a minimum of 6" in diameter and shall be installed after the confluence of all waste streams from the facility and prior to discharging into the sanitary sewer collection system. The well shall be perpendicular to the effluent lateral to allow visual observation of the flow stream and provide for sampling of wastewater.

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